

Name: _____ Date: _____ Period: _____

Unit 7 Test - Form B

45

Slope

Find the slope given the following information. (8 points)

$(6, -12) (15, -3)$

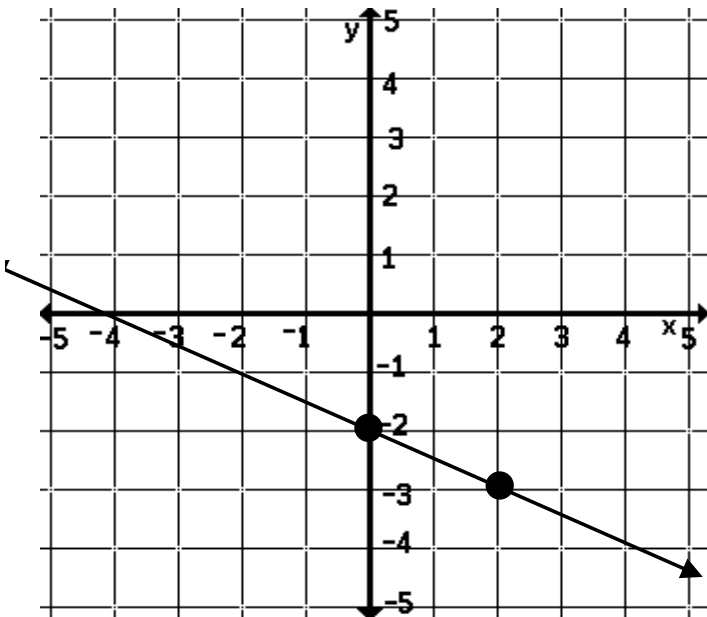
$(-1, 4) (3, -2)$

x	y
1	4
2	8
3	12

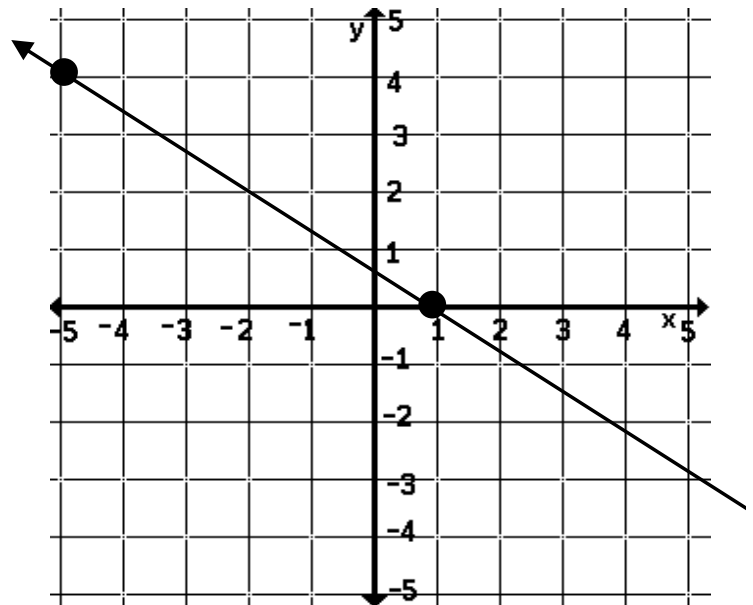
m = _____

x	y
3	5
5	6
7	7

m = _____



m = _____

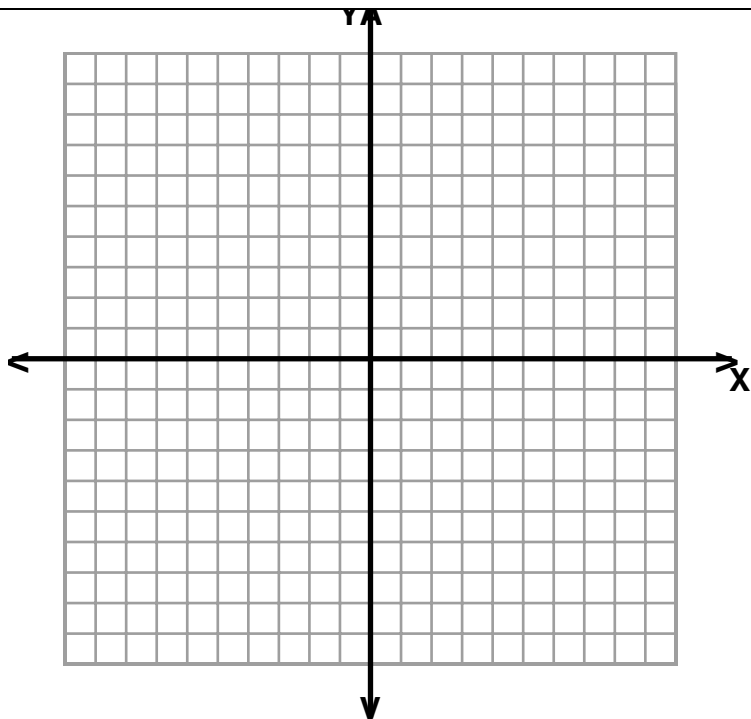


m = _____

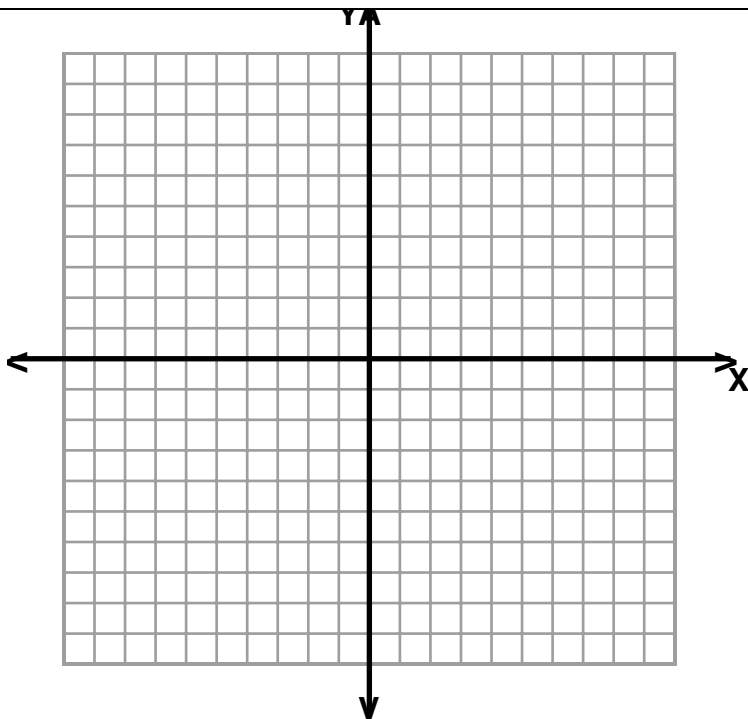
Slope-Intercept Form

Write an equation for each in slope-intercept form. Then, graph your equation. (2 points each)

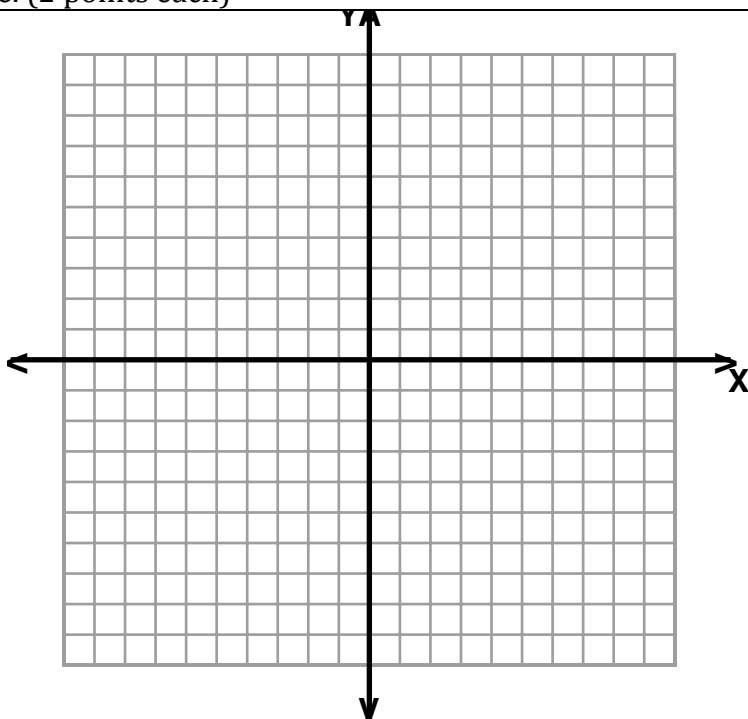
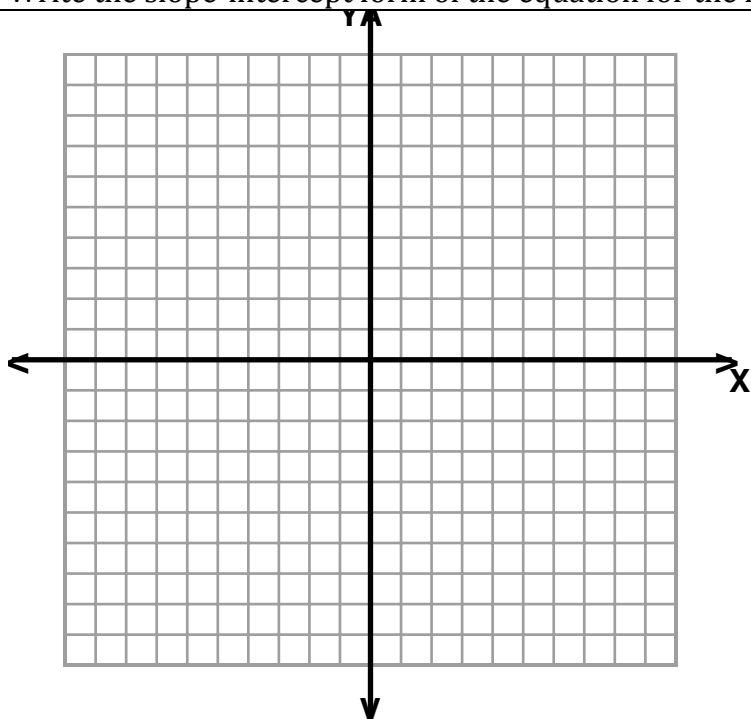
$$m = 2, b = -3$$



$$m = -(3/2), b = 2$$



Write the slope-intercept form of the equation for the line. (2 points each)

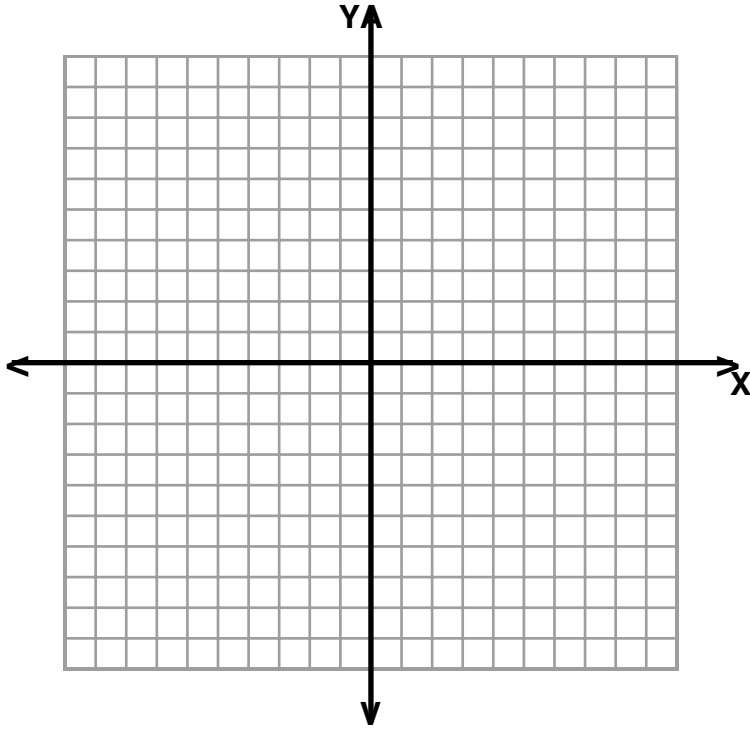


Standard Form

Find the x - and y-intercepts. Then graph each equation using the intercepts. (3 points each)

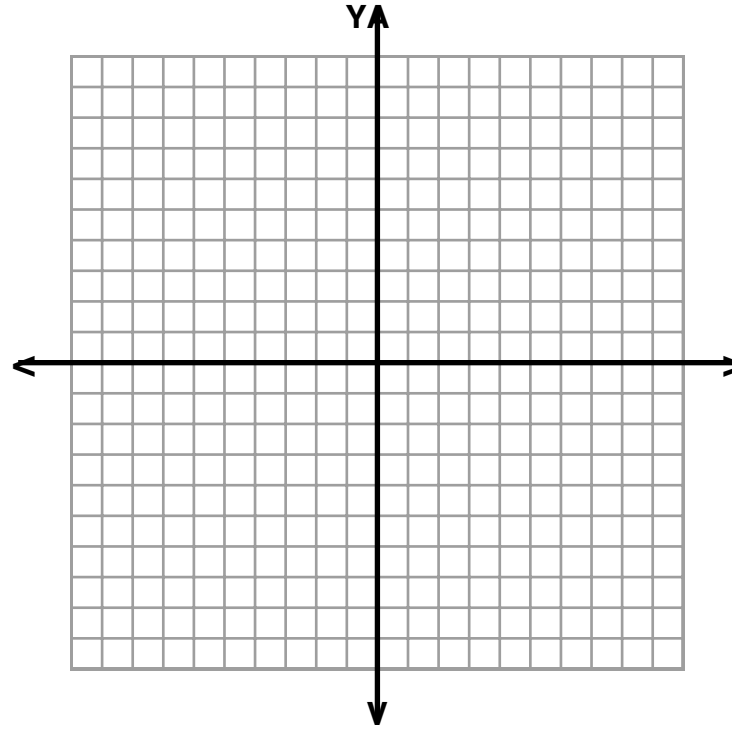
$$-3x + y = 6$$

x-intercept: _____ y-intercept: _____



$$5x - 3y = 15$$

x-intercept: _____ y-intercept: _____



Write each equation in standard form using only integers. (2 points)

$$y = 3x + 1$$

$$y = \frac{1}{2}x - 3$$

Parallel and Perpendicular Lines

Identify which lines are parallel. (1 point)

a. $y = \frac{5}{3}x$

b. $y = -2x + 2$

c. $y = -2x + 4$

d. $y = 2x - 1$

Identify which lines are perpendicular. (1 point)

a. $y = 2x + 1$

b. $y = -x$

c. $y = x - 2$

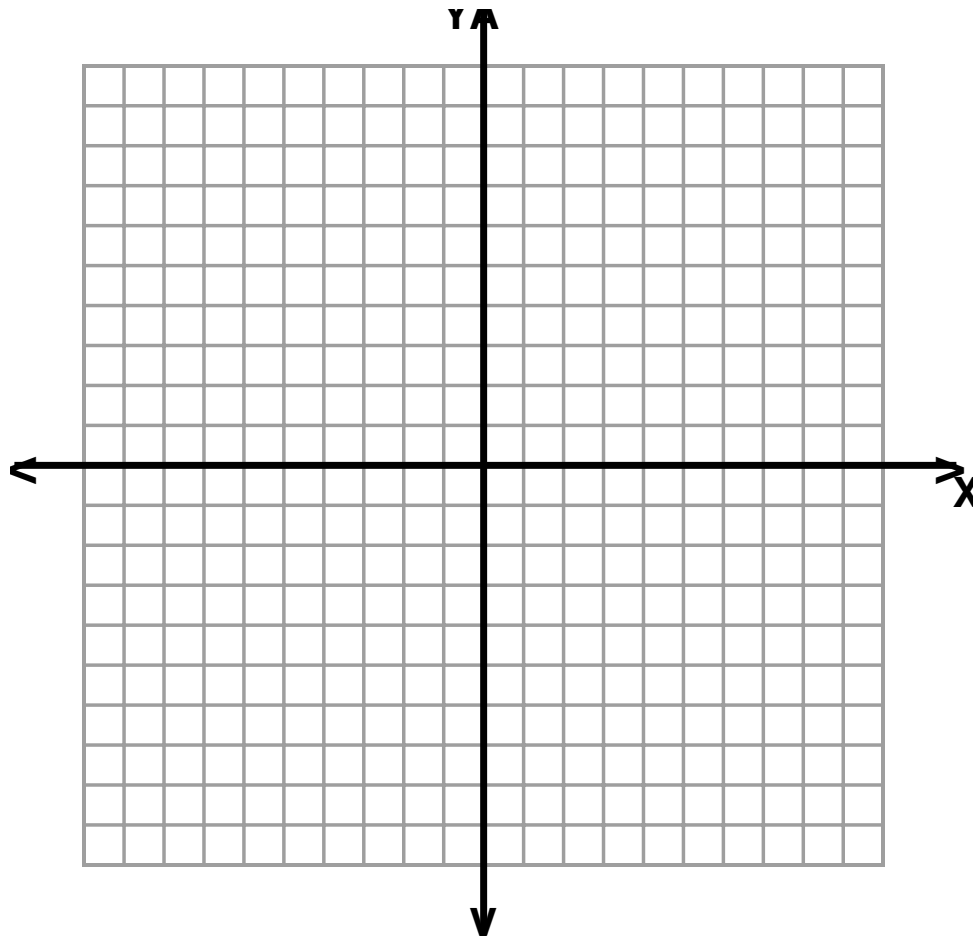
d. $y = -\frac{1}{2}x$

Given the equation $y = 2x + 3$. Answer the following questions. (2 points each)

Write an equation that is parallel to $y = 2x + 3$.

Write an equation that is perpendicular to $y = 2x + 3$.

Graph your two equations with $y = 2x + 3$. Be sure to label each line!



Graph each equation. Then describe the shape that has been made as a result. (3 points)

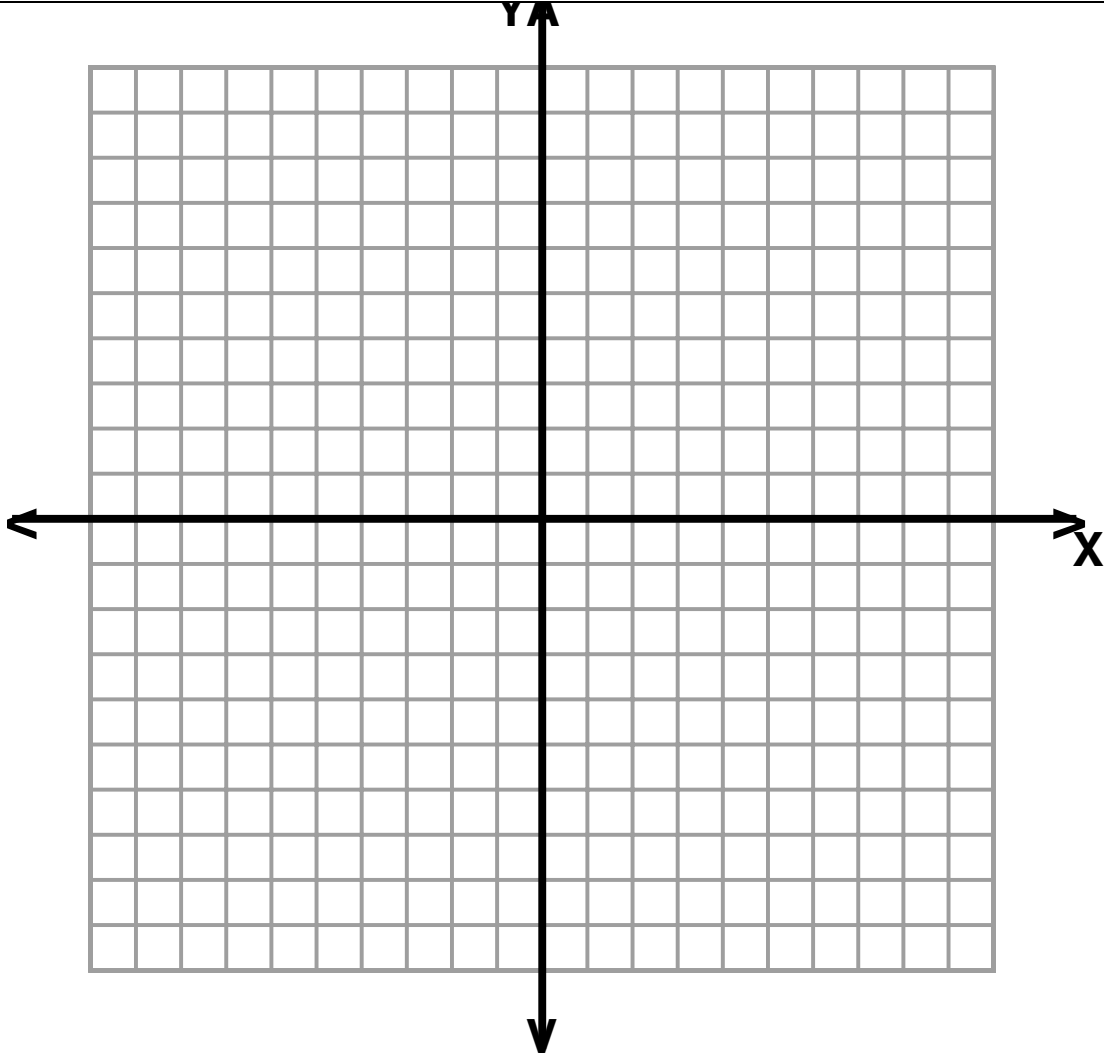
$x = 2$

$y = 3$

$y = 7$

$x = 8$

Shape:

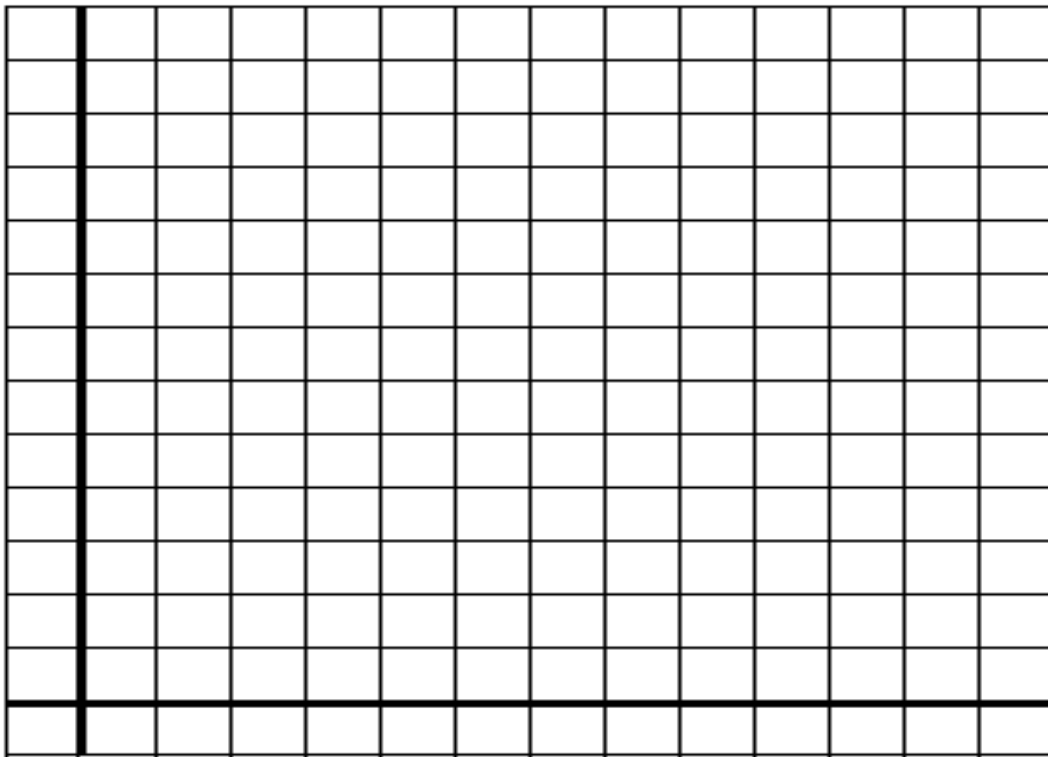


Word Problems (5 points each)

Situation: An attorney charges a fixed fee of \$250 for an initial meeting and \$150 per hour for all hours worked after that. Write a linear function to describe the situation. Then graph your function. (5 points)

Let ____ = _____ Let ____ = _____

Equation:



Situation: Louise has \$35 in five-dollar bills and singles. (5 points)

a. Write an equation in standard form to represent this equation.

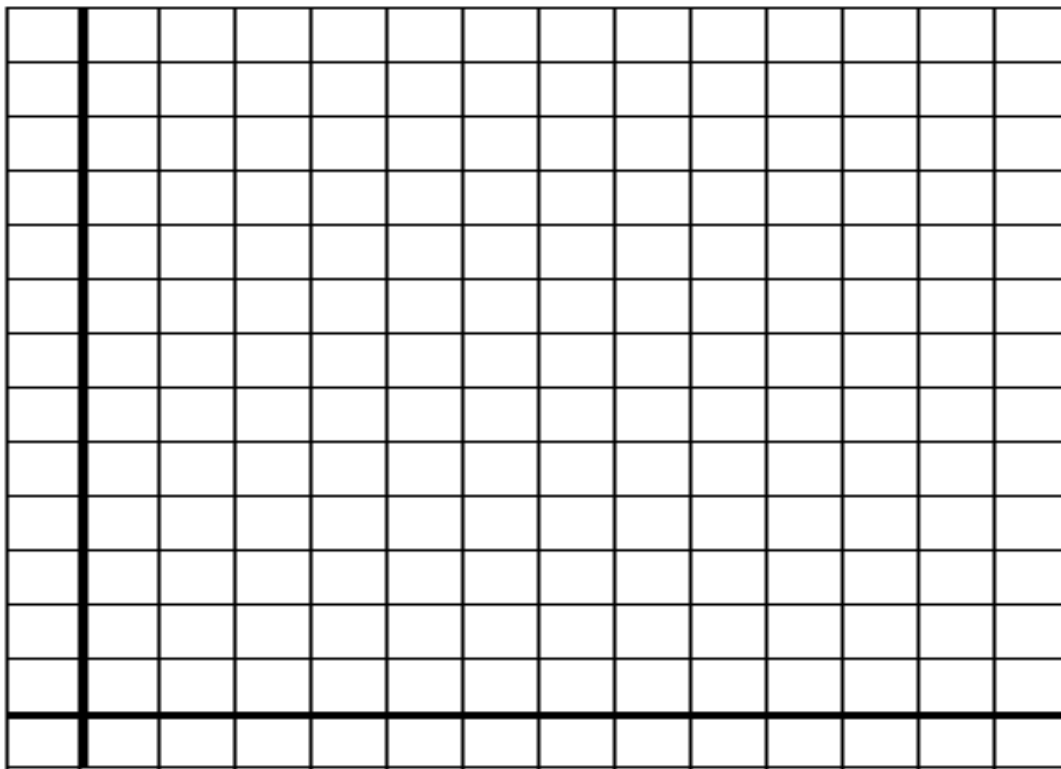
Equation: _____

b. Find the x and y-intercepts.

x-intercept: _____

y-intercept: _____

c. Graph the equation using the x and y-intercepts.



d. Use your graph to determine one possible combination of how many five and one-dollar bills Louise has.

Math Honor Code: Please copy this statement below, then sign your name.
My signature certifies that this is my work. I did not give or receive help on it.

X _____

